

**HOD ACTION: Council on Medical Education Report 4 adopted and the remainder of the report filed.**

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 4-A-15

Subject: Guidelines for Students Shadowing Physicians  
(Resolution 310-A-13, Resolution 913-I-13)

Presented by: William A. McDade, MD, Chair

Referred to: Reference Committee C  
(Daniel B. Kimball, Jr., MD, Chair)

---

1 Resolution 310-A-13, “Medical Facility Regulations for Students Shadowing Physicians,”  
2 introduced by the Georgia Delegation and referred by the House of Delegates (HOD), asked that  
3 our American Medical Association (AMA) develop standard criteria for students to shadow  
4 physicians in medical facilities. The resolution noted that high school and premedical students are  
5 “strongly encouraged” by medical school admissions committees to have clinical shadowing  
6 experience. However, the Health Insurance Portability and Accountability Act (HIPAA) and other  
7 regulations (e.g., those dealing with patient rights, privacy and confidentiality) often serve as  
8 impediments to many physicians who might otherwise provide student shadowing experiences. In  
9 addition, individual hospitals may have standards for shadowing of physicians by students, but  
10 these vary widely from one institution to the next, with no recognized national standard in place.

11  
12 Resolution 913-I-13, “Pre-Medical School Shadowing,” submitted by the Washington Delegation  
13 and referred by the HOD, asked that our AMA (1) promote the development of programs that assist  
14 physicians in providing premedical shadowing opportunities; and (2) communicate to the  
15 Association of American Medical Colleges that for medical schools which have the premedical  
16 shadowing requirement, aiding these underprivileged students in getting their shadowing is an  
17 obligation of the medical school. Testimony at the I-13 meeting on this resolution supported the  
18 need for appropriate guidelines for providing premedical school shadowing opportunities. In  
19 addition, increased opportunities for shadowing may help increase diversity in medicine by raising  
20 awareness among individuals from diverse backgrounds of the possibility of medicine as a career.  
21 It was suggested that such programs may contribute to improved motivation and experience,  
22 leading to increased matriculation and lower attrition rates. Questions were raised, however, as to  
23 the responsibility of medical schools to offer shadowing opportunities.

24  
25 In response to these two resolutions, Council on Medical Education Report 8-A-14, “Guidelines for  
26 Students Shadowing Physicians,” asked that our AMA: (1) encourage wide dissemination of the  
27 Association of American Medical Colleges’ clinical shadowing guidelines to interested parties,  
28 including K-12 students, premedical students, health professions advisors, hospitals, medical  
29 schools and physicians and (2) encourage all physicians to provide shadowing opportunities to  
30 premedical students. The report also called for AMA Policy D-295.941, Facilitating Access to  
31 Health Care Facilities for Training, to be amended by addition to state that the AMA “work with  
32 the Association of American Medical Colleges and other national organizations to expedite,  
33 wherever possible, the standardization of requirements in regards to training on HIPAA, drug  
34 screening, and health requirements for premedical and medical students, and resident and fellow  
35 physicians who are being educated in hospitals and other health care settings.”

1 At the A-14 HOD meeting, mixed testimony was heard on CME Report 8 during the reference  
2 committee hearing. It was noted that the amount of paperwork required of physicians to offer a  
3 shadowing opportunity is onerous. Accordingly, this report was referred for a more thorough  
4 review of physician shadowing and the appropriate mechanisms to ensure that individuals from  
5 underprivileged and under-represented minority groups are afforded equal opportunity to  
6 participate in shadowing experiences.

## 7 8 BACKGROUND

9  
10 It is important to differentiate *shadowing* from *volunteering*. Volunteering offers an opportunity to  
11 help (without compensation) in a health care setting; duties might include filing paperwork,  
12 answering phones and similar functions. Shadowing, in contrast, is strictly observational but  
13 directly related to the provision of clinical care, with the student observing as the health  
14 professional provides care to patients. This may occur in varied clinical settings, including  
15 hospitals, outpatient clinics, long-term care facilities and/or office practices. Observation always  
16 occurs under the appropriate supervision of a licensed physician or other licensed health care  
17 professional. (Note: This report does not cover what are often referred to as observerships, which  
18 are often undertaken by international medical graduates [IMGs] as they seek to gain exposure to  
19 and understanding of the practical and sociocultural aspects of U.S. medical education and health  
20 care. The AMA has previously developed guidelines for such programs; these are available via the  
21 AMA website at [ama-assn.org/ama/pub/about-ama/our-people/member-groups-](http://ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/international-medical-graduates/observership-guidelines.page?)  
22 [sections/international-medical-graduates/observership-guidelines.page?.](http://ama-assn.org/ama/pub/about-ama/our-people/member-groups-sections/international-medical-graduates/observership-guidelines.page?))

23  
24 The benefits of a shadowing experience for the student include exposure to the day-to-day realities  
25 of medical practice and tangible evidence (for admissions committees) of their commitment to  
26 becoming a physician. For example, a summertime medical program for high school students at the  
27 University of Oklahoma College of Medicine, which included a shadowing component, resulted in  
28 “increased understanding of the medical school application process, the medical curriculum and the  
29 medical field, and an increase in students’ likeliness to choose a medical career.”<sup>1</sup> Similarly, a  
30 study of premedical students in a shadowing program at Stanford University found “significant  
31 increases in familiarity with physician responsibilities and in understanding physician-patient  
32 interactions.”<sup>2</sup>

33  
34 Such experiences, however, may raise ethical issues for patients in the clinical setting. The author  
35 of a June 2011 commentary in *JAMA*, for example, stated that any potential benefits of shadowing  
36 from the student perspective “are eclipsed by potential damage to the patient-physician  
37 relationship.”<sup>3</sup> Further, a review published in *Academic Medicine* in January 2013 called for further  
38 research and the creation of objective outcomes measures. The authors proposed “developing  
39 guidelines and introducing a code of conduct for pre-medical students, to enhance the consistency  
40 of shadowing experiences and address ethical and practical considerations.”<sup>4</sup>

41  
42 In addition, these authors found scant medical literature on shadowing and its impacts on students,  
43 physicians and patients. Indeed, a recent PubMed search using the term “physician shadowing”  
44 returned 75 results (available at: [ncbi.nlm.nih.gov/pubmed/?term=physician+shadowing](http://ncbi.nlm.nih.gov/pubmed/?term=physician+shadowing)), the  
45 majority of which are not relevant to this report. One study that is relevant examined the impact of  
46 an academic summer research, shadowing and mentorship program on college students interested  
47 in medicine and surgery. The authors surveyed 48 participants in the program, with 44 respondents,  
48 and found that “proficiency in all categories assessed improved considerably, including medical  
49 terminology, abstract writing, statistical analysis, graph and table construction, article writing, and  
50 video production. During the last 5 years, participants coauthored 112 national presentations (29  
51 video presentations), 46 published abstracts, and 57 peer-reviewed published articles. Ninety-two

1 percent developed more favorable opinions of a career in medicine; 8 percent believed the  
2 experience deterred them from a career in medicine because of lifestyle and [study] demands.  
3 Seventy-seven percent believed the program promoted a career in surgery; 82 percent believed it  
4 elevated their goals to become leaders in American medicine.” They concluded that such programs  
5 for college and graduate students can lead to improved academic productivity and attainment of  
6 career goals, and that academic surgeons can play an influential role in this regard.<sup>5</sup>

7  
8 Shadowing, and the concerns surrounding it, is a frequent subject of discussions on the email  
9 listserv of the National Association of Advisors for the Health Professions (NAAHP). Advisors  
10 note that, as regulations tighten in health care settings, developing and overseeing clinical  
11 educational and shadowing experiences has become more challenging than in the past. Some of the  
12 issues that may dissuade physician offices and hospitals from serving as sites for clinical  
13 shadowing include concerns over potential liability, HIPAA regulations, lack of time or staff for  
14 oversight, and ethical concerns, including informed consent and patient confidentiality.

15  
16 In some areas, students are required to complete a training program prior to entering into a  
17 shadowing experience, to include HIPAA certification, criminal and child abuse background  
18 checks and drug testing. The authors of a 2011 letter to *JAMA* proposed three broad guidelines to  
19 ensure that medical ethics and legal requirements are not compromised during shadowing  
20 experiences: “First, the student must complete HIPAA regulations, the physician must judge if the  
21 appointment is appropriate for observing, and the physician should specify boundaries for  
22 educational dialogue and note taking. Second, on being introduced to the patient, the pre-medical  
23 student should clearly identify himself or herself as a college student observing to learn more about  
24 a medical career. It is deceptive to say he or she is a member of the team or working with the  
25 physician. Third, the patient should be told that there is no obligation to allow the observation and  
26 refusal is understandable. These criteria would prevent misrepresentation and create  
27 transparency—ethical principles that can never be introduced too early in an education.”<sup>6</sup>

28  
29 In summary, shadowing should be clearly defined (as separate from volunteering, for example, or  
30 observerships). A limited number of studies on shadowing have been published in the peer-  
31 reviewed literature; more research may help quantify the benefits (and costs) of shadowing.  
32 Existing studies have shown that students who undertake a shadowing experience become more  
33 familiar with the practice of medicine and how physicians interact with patients in the clinical  
34 setting. This raises the question, however, of possible negative impacts on the patient-physician  
35 relationship and the need for ethical guidance in this arena. Additional concerns, for the physician,  
36 include potential liability and lack of time or staff for oversight of students.

### 37 38 THE PROFESSION’S RESPONSIBILITY FOR PROVIDING SHADOWING EXPERIENCES

39  
40 In theory, physicians are willing to engage and train the next generation of practitioners and  
41 provide career guidance for college and university students aspiring to become physicians. In  
42 practice, however, this inclination often collides with the reality of modern medicine, in which  
43 physicians are under significant time and performance pressures. In addition, the regulatory, legal  
44 and ethical issues cited above may cause even the most altruistic physician to reconsider taking on  
45 this additional “unfunded mandate.” Often there are also first and second-year medical students  
46 who want to shadow; these students may have priority, given a physician’s busy schedule.

47  
48 Most medical schools have admissions criteria that medical school applicants should have  
49 completed a certain number of hours in shadowing/observership (some recommend at least 40  
50 hours). Accordingly, as proposed in Resolution 913-I-13, it may be appropriate to encourage

1 medical schools to help premedical students meet this requirement by ensuring availability of  
2 shadowing programs.

3  
4 Such programs are particularly needed with regard to students from underrepresented minority  
5 populations, who may lack the resources and connections to obtain the needed experience.<sup>7</sup> Not  
6 providing ready access to such experiences could mean that shadowing requirements have the  
7 unintended effect of further disenfranchising minority and economically disadvantaged students  
8 and reducing the number of medical school matriculants from these sectors of society.  
9 Furthermore, students enrolled in resource-poor K-12 schools and undergraduate education systems  
10 may face increased barriers to attaining medical shadowing experiences; special outreach to such  
11 students may be warranted to facilitate access to shadowing opportunities.

12  
13 The AMA is helping address these concerns through its Doctors Back to School (DBTS) program  
14 ([ama-assn.org/go/dbts](http://ama-assn.org/go/dbts)), launched in 2002 by the AMA Minority Affairs Section and the  
15 Commission to End Healthcare Disparities. Through the program, minority physicians and medical  
16 students volunteer at local schools to introduce youth to professional role models. DBTS aims to  
17 show children and adolescents, especially those from underrepresented racial and ethnic groups,  
18 that medicine is an attainable career option for everyone.

19  
20 Nationwide, a number of schools have taken up the challenge to increase the number of physicians  
21 from minority populations through providing shadowing experiences, similar to the University of  
22 Oklahoma program noted above. One such offering is the Summer Medical and Dental Education  
23 Program (SMDEP). This free, six-week summer academic enrichment program that offers  
24 freshman and sophomore college students intensive and personalized medical and dental school  
25 preparation (available at: [oregon.gov/oha/oei/Documents/Strategies\\_for\\_PipelineProgs.pdf](http://oregon.gov/oha/oei/Documents/Strategies_for_PipelineProgs.pdf)).  
26 Formerly known as the Minority Medical Education Program, SMDEP was established in 1988 by  
27 The Robert Wood Johnson Foundation to increase the number of highly qualified medical school  
28 applicants from minority groups underrepresented in medicine. Over the years, the program has  
29 broadened its initial focus on specific minority groups to include students from rural and  
30 economically disadvantaged backgrounds, regardless of race or ethnicity. Today, the program  
31 encompasses 11 sites nationwide:

- 32  
33
- 34 • Case Western Reserve University School of Medicine
  - 35 • Columbia University College of Physicians and Surgeons
  - 36 • Duke University School of Medicine
  - 37 • Howard University College of Medicine
  - 38 • Rutgers New Jersey Medical School
  - 39 • University of California, Los Angeles, David Geffen School of Medicine
  - 40 • University of Louisville School of Medicine
  - 41 • University of Texas Medical School at Houston
  - 42 • University of Virginia School of Medicine
  - 43 • University of Washington School of Medicine
  - 44 • Yale University School of Medicine

45 In addition, the University of Washington School of Medicine website  
46 ([uwmedicine.org/education/md-program/admissions/applicants/shadowing](http://uwmedicine.org/education/md-program/admissions/applicants/shadowing)) offers information on  
47 shadowing to prospective students and lists helpful national, regional, and state resources.

1 DEVELOPMENT OF SHADOWING GUIDELINES

2  
3 In response to the need for a more comprehensive approach, the Association of American Medical  
4 Colleges worked in close collaboration with the AMA and the NAAHP, among others, to develop  
5 shadowing guidelines for premedical students. The recommended guidelines  
6 ([aamc.org/download/356316/data/shadowingguidelines2013.pdf](http://aamc.org/download/356316/data/shadowingguidelines2013.pdf)), released in 2013, include student  
7 learning objectives and responsibilities, a model physician-student agreement, a student code of  
8 conduct, and a student agreement on confidentiality and privacy of patient information.

9  
10 Another organization that provides information on shadowing is the American Association of  
11 Colleges of Osteopathic Medicine ([aacom.org/InfoFor/applicants/becoming/Pages/](http://aacom.org/InfoFor/applicants/becoming/Pages/ShadowaDO.aspx)  
12 [ShadowaDO.aspx](http://aacom.org/InfoFor/applicants/becoming/Pages/ShadowaDO.aspx)). Similar to allopathic medical schools, colleges of osteopathic medicine  
13 encourage applicants to learn more about the profession by identifying an osteopathic physician to  
14 shadow. Many DOs' offices will host a premedical student for one or two days.

15  
16 EXISTING AMA POLICY

17  
18 The AMA does not have existing policy on shadowing, but it does have significant policy related to  
19 increasing opportunities for underrepresented minorities to enter the field of medicine, including:

20  
21 H-350.960, Underrepresented Student Access to US Medical Schools

22 Our AMA: (1) recommends that medical schools should consider in their planning: elements of  
23 diversity including but not limited to gender, racial, cultural and economic, reflective of the  
24 diversity of their patient population; and (2) supports the development of new and the enhancement  
25 of existing programs that will identify and prepare underrepresented students from the high-school  
26 level onward and to enroll, retain and graduate increased numbers of underrepresented students.  
27 (Res. 908, I-08)

28  
29 D-350.995, Reducing Racial and Ethnic Disparities in Health Care

30 Our AMA's initiative on reducing racial and ethnic disparities in health care will include the  
31 following recommendations: ... (3) Promoting diversity within the profession by encouraging  
32 publication of successful outreach programs that increase minority applicants to medical schools,  
33 and take appropriate action to support such programs, for example, by expanding the "Doctors  
34 Back to School" program into secondary schools in minority communities. (BOT Rep. 4, A-03;  
35 Reaffirmation A-11)

36  
37 E-9.121, Racial and Ethnic Health Care Disparities

38 (6) Increasing the diversity of the physician workforce may be an important step in reducing racial  
39 and ethnic health care disparities. Physicians should therefore participate in efforts to encourage  
40 diversity in the profession.

41  
42 In addition to these policies addressing racial/ethnic diversity, AMA Policy D-295.941, Facilitating  
43 Access to Health Care Facilities for Training, calls on the AMA to "work with the Association of  
44 American Medical Colleges and other national organizations to expedite, wherever possible, the  
45 standardization of requirements in regards to training on HIPAA, drug screening, and health  
46 requirements for medical students, and resident and fellow physicians who are being educated in  
47 hospitals and other health care settings." This particular policy, however, specifies medical students  
48 and resident/fellow physicians, not premedical or K-12 students.

1 SUMMARY AND RECOMMENDATIONS

2  
3 In many cases, shadowing for a given K-12 or premedical student is valuable and could make the  
4 difference between a successful career in health care or a missed opportunity. As part of its  
5 mission, the AMA could encourage physicians to “pay it forward” to the next generation by  
6 offering the opportunity for shadowing. A list of hospitals and physicians willing to allow students  
7 to shadow would be useful, but that would be a more substantive role than the AMA can assume, is  
8 outside the scope of the AMA’s strategic focus areas, and would entail a significant fiscal  
9 investment.

10  
11 Other ways to further improve shadowing include: 1) an agreed-upon metric for all medical schools  
12 specifying the required quantity and quality of shadowing experiences for applicants; 2) similar  
13 standardization among medical schools, hospitals and physicians offering shadowing experiences  
14 as to the content and length of such programs; 3) development of HIPAA training modules for  
15 premedical students; and 4) a national “shadow for a day” event, to create more awareness of the  
16 need for shadowing, particularly as it relates to increasing physician diversity. Again, as noted  
17 above, such activities are outside the scope of the AMA’s work, but the AMA might encourage  
18 other appropriate organizations (including the AAMC and/or NAAHP) to undertake this work.

19  
20 The development of clinical shadowing guidelines by the AAMC is timely and should help  
21 increase nationwide standardization of shadowing experiences for premedical students. The AMA  
22 should encourage awareness and use of these guidelines and call upon medical schools, physicians  
23 and others to help ensure availability of shadowing opportunities, particularly for students from  
24 underrepresented populations.

25  
26 The Council on Medical Education therefore recommends that the following recommendations be  
27 adopted in lieu of Resolutions 310-A-13 and 913-I-13 and that the remainder of this report be filed.

- 28  
29 1. That our American Medical Association (AMA) encourage physicians in both private  
30 practice and academic settings to provide shadowing opportunities to students interested in  
31 a career in medicine—particularly those from underrepresented populations—as part of the  
32 physician’s commitment to the future of the profession. (Directive to Take Action)  
33  
34 2. That our AMA encourage physicians to adopt the most appropriate shadowing model to the  
35 needs of the practice/institution and the student(s). (Directive to Take Action)  
36  
37 3. That our AMA endorse the clinical shadowing guidelines for students from the Association  
38 of American Medical Colleges as one model for such students and help disseminate this  
39 document to K-12 students, premedical students, health professions advisors, hospitals, and  
40 physicians. (Directive to Take Action)

Fiscal Note: \$500.

## REFERENCES

- <sup>1</sup> Larson J et al. The University of Oklahoma College of Medicine summer medical program for high school students. *J Okla State Med Assoc*. 2011 Jun;104(6):255-9.
- <sup>2</sup> Wang JY, Hillary L, Lewis PY, Fetterman DM, Gesundheit NM. Is a Career in Medicine the Right Choice? The Impact of a Physician Shadowing Program on Undergraduate Premedical Students. *Acad Med*. 2015 Jan. 6. Available at: [http://journals.lww.com/academicmedicine/Abstract/publishahead/Is\\_a\\_Career\\_in\\_Medicine\\_the\\_Right\\_Choice\\_The.98881.aspx](http://journals.lww.com/academicmedicine/Abstract/publishahead/Is_a_Career_in_Medicine_the_Right_Choice_The.98881.aspx). Accessed February 16, 2015.
- <sup>3</sup> Kitsis EA. Shining a Light on Shadowing. *JAMA*. 2011;305(10):1029-1030.
- <sup>4</sup> Kitsis EA, Goldsammler M. Physician shadowing: a review of the literature and proposal for guidelines. *Acad Med*. 2013 Jan;88(1):102-10.
- <sup>5</sup> Hernandez JI, Al-Saadi S, Boyle R, Villadolid D, Ross S, Murr M, Rosemurgy A. Surgeons can favorably influence career choices and goals for students interested in careers in medicine. *J Am Coll Surg*. 2009 Jul;209(1):62-7. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/19651064>.
- <sup>6</sup> Wong KR, Gold JA. Shadowing Physicians. *JAMA*. 2011;305(23):2414-2416.
- <sup>7</sup> Diversity in Medical Education, Facts and Figures 2012. Association of American Medical Colleges. Available at: [members.aamc.org/eweb/upload/Diversity%20in%20Medical%20Education\\_Facts%20and%20Figures%2012.pdf](http://members.aamc.org/eweb/upload/Diversity%20in%20Medical%20Education_Facts%20and%20Figures%2012.pdf).